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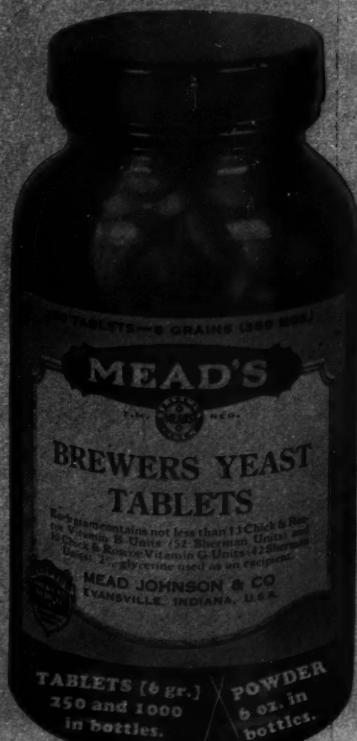
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(1) J. Amer. Med. Assn. 101, 127 (1933)

(2) Ind. Eng. Chem. 23, 1064 (1931)
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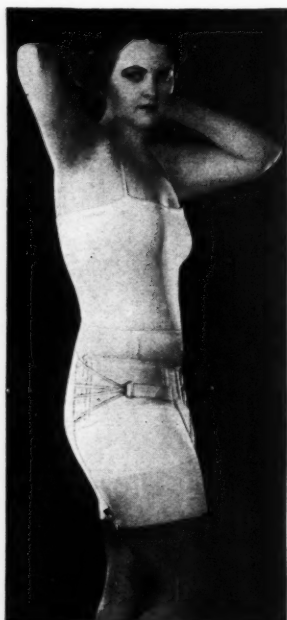
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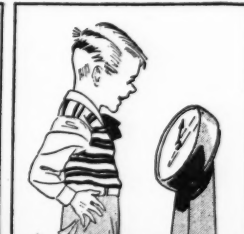
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ANGINA PECTORIS—ITS TREATMENT WITH INSULIN-FREE PANCREATIC EXTRACT, "TISSUE EXTRACT NO. 568" (DESYMPATONE)*

JOSEPH B. WOLFFE, M. D.
Philadelphia, Pa.

A resume of the literature and the results obtained with a pancreatic tissue extract which possesses epinephrine—antagonizing qualities were previously reported. (2) We found it to be of aid in the treatment of angina pectoris and intermittent claudication. We suggested the name "Desympatone" for the epinephrine-neutralizing fraction, which we believe to be responsible for the beneficial effect obtained. This paper reports further pharmacological, chemical and clinical studies made by other investigators, my colleagues and myself.

PHARMACOLOGY OF DESYMPATONE

Because of the prevalence of histamine and cholin in extracts from tissues the question frequently arises as to the possibility of these substances being responsible for the pharmacologic action of tissue extract. In spite of many published researches to the contrary (3, 4, 5, 6, 7, 8) this is still a common criticism expressed by those whose studies have been incomplete. Our further experiments show that the effect of tissue extract is not due to histamine or choline although variable quantities of both substances may be found in the tissue extract as prepared by the method previously published.

We have shown that we obtain a definite rise in blood pressure when histamine is administered intravenously to rabbits under urethane and ether anesthesia while tissue extract No. 568 causes a drop in blood pressure in the same rabbits. In fact, the pressor

effect of histamine may be quantitatively neutralized by admixture with the proper volume of tissue extract. This we have repeatedly confirmed.

Munch, Quici and I have also shown that acetylcholine administered to dogs under morphine-chloretone anesthesia has a definite depressor effect and neutralizes the pressor effect of epinephrine, similar to tissue extract No. 568. Following the administration of two milligrams of atropine sulphate per kilo. tissue extract No. 568 still possesses depressor and epinephrine neutralizing qualities, while acetylcholine has no such effect. Here we observed that not only does acetylcholine have no depressor effect following a tropinization but the rise in blood pressure following the administration of epinephrine may be even greater than before. This has been observed in routine pharmacological experiments in medical schools and may be partly due to the paralyzing effects of atropine on the neurogenic component of the parasympathetic division of the autonomic system, permitting a still greater preponderance of the unopposed sympathetic division. We interpret this to indicate that acetylcholine stimulates the neurogenic component of the parasympathetic division of the autonomic system, because following the administration of atropine sulphate which paralyzes the parasympathetic nerve endings acetylcholine is no longer effective. Tissue extract No. 568, on the other hand, still is active after as before the administration of atropine sulphate. We therefore believe that tissue extract No. 568 acts mainly on the metabolic component of the parasympathetic division of the autonomic system. Further researches are being carried on to shed light on this.

We have shown further that the desired

*Read before the New Castle County Medical Society, Wilmington, February 19, 1935.

physiological activity of tissue extract No. 568 is due to its Desympatone fraction and could not be reproduced by inorganic salts, non-specific proteins (this was corroborated by Barker, Brown, and Roth), (9) adenosin phosphoric acid, choline and its derivatives or histamine. Daughenbaugh (10) has been making an intensive study of various methods of extraction proposed for the preparation of products of this type from the pancreas, liver, brain, muscle and urine. The details of his investigation will be published in a chemical journal. In his work Daughenbaugh destroyed the insulin by alkaline treatment. He precipitated out whole nucleic acid with alcohol, eliminated protein by precipitation and filtration with the aid of colloidal iron. He eliminated histamine by adsorption on charcoal and extracted choline and choline compounds with ether. The final product which he obtained answered the pharmacologic test of the originally described "Desympatone."

Recently Rabinowitz (11), working with tissue extract No. 568 pointed out the possibility that it also possesses a lecithinogenic function. He stated "A lecithinogenic hormone has been isolated from the pancreas which is similar to the action of insulin on sugar, both storing and breaking up lecithin, and acting as the regulatory mechanism in lecithin metabolism." He also showed that a Kraut positive substance which he thought to be choline appears in the urine following the administration of Tissue extract No. 568. We have confirmed his observations. In a later publication we hope to show that desympatone influences many of the other metabolites which play an important role in muscle function.

CLINICAL RESULTS WITH TISSUE EXTRACT No. 568

During the last five years, we have treated 356 cases with tissue extract No. 568 who had failed to respond to the usual methods of therapy (Table 1). It was interesting to find that out of 280 cases of angina pectoris, 37 per cent gave a history of intermittent claudication from six months to ten years prior to the onset of angina pectoris.

Two hundred and four cases were treated according to the following method:

In planning treatment for these patients a very important therapeutic principle must be kept in mind. The constitutional make-up of individuals varies greatly. Although they are often referred to as sympathetic and parasympathetic individuals, we will here consider them as agitated and inhibitive types, in order not to complicate matters. The members of the agitated group are jumpy, energetic, flare up easily, are somewhat aggressive, and frequently impatient. They are creative, promoters, and subject to attacks of angiospastic disease at a comparatively young age.

The inhibitive type are by contrast deliberate, easy going, and passive. They can look upon human achievements without envy. Needless to say there is no line of demarcation between these two groups, although in daily practice we can learn to recognize these two types without any difficulty.

In all cases it is important:

1. To stop the attack of pain either by giving 1/100 grain nitroglycerine, or amyl nitrite.

2. Adjust the individual's physical activity to his diminished capacity.

3. Advise him to rest as much as possible and institute a change of environment wherever advisable.

Further treatment must be considered separately for the two groups.

GROUP 1 (agitated).

- (a) Soft diet, rich in calcium and easily digested foods.

- (b) Daily injections of 1 to 2 c. c. (10 to 20 units) of insulin-free Tissue Extract No. 568, should be administered for at least 12 doses. It is best to keep the patient at rest during this period of treatment. Following this the same amount may be administered every second or third day until the attacks subside. Then give 5 grains of insulin-free pancreatic extract, or whole pancreas, by mouth, t. i. d., preferably a few hours after meals.

- (c) Rx

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To be taken for many months.

GROUP 2 (negative or inhibitive type).

(a) An alkaline ash diet, low in calcium, mainly consisting of fruits and vegetables, seems to be best.

(b) Twelve injections of insulin-free tissue extract No. 568, three to 5 c. c. (30 to 50 units) daily and then every second or third day until the attacks subside. (Note that the doses in these cases are much larger). Then give 5 grains of insulin-free pancreatic extract or whole pancreas, by mouth, t. i. d., preferably a few hours after meals.

(c) An alkaline sedative and laxative mixture, preferably one which contains a great deal of potassium.

At times good results are obtained in this group by the use of quinine sulphate, two grains, and iron ferrocyanide soluble, two grains, t. i. d.

In seventy-eight of these cases the results were most striking. They have been entirely free from symptoms for one to three years. In sixty-two cases improvement was marked while under therapy; twenty-three returned after a six months period but were again controlled by sedatives. Nineteen were only controlled after sedatives and another course of tissue extract; nine of these died of cardiac failure, three had cerebral vascular accidents resulting in death of one and hemiplegia of two. Both hemiplegia cases became free from angina pectoris (this we believe can be attributed to their inactivity). Eight could only be controlled with morphine. Sixty-four cases did not respond to any form of therapy. Most of these patients suffered from advanced coronary disease with myocardial infarction. Seventeen of this group died suddenly within three months.

Thirty-four cases comprise a most interesting and striking group. In these the attacks of angina pectoris were controlled following the administration of tissue extract No. 568, sedatives and analgesics as guided by their constitutional makeup. (13) Fortunately we later discovered what we believed to be an underlying etiological factor. Sixteen of this

group were cases of masked hyperthyroidism, in whom thyroidectomies were performed ranging from partial lobectomy to complete extirpation. Eleven were cases of cholelithiasis and cholecystitis in whom cholecystectomies were performed. Five were cases of cardiovascular lues who had repeatedly negative Wassermann and Kahn serological reactions prior to provocative and therapeutic tests. One was a case of focal infection from empyema of an antrum. Following the removal of the noxious etiologic factors thirty-one of these thirty-four cases have so far been entirely relieved of the attacks of angina pectoris and have been able to resume the type of physical work they were incapable of doing for years.

Of twenty-six cases of intermittent claudication, seventeen were entirely relieved. Nine improved while under the treatment but were subject to recurrences; seven of these were later controlled after complete discontinuance of tobacco. However, their capacity for effort was definitely limited. Four of the seventeen cases occurred in pregnant women with unimpaired circulation. They were completely relieved.

In nineteen cases of thromboangiitis obliterans, eleven showed marked improvement with increased capacity for effort ranging from two to five times the amount. In no case was the rubor improved. Seven cases with ulcerations varying in size from a half to four centimeters in area showed a definite improvement in healing of the ulcers. However, in three of these the ulcerations were so advanced and the pain so extremely severe that the treatment could not be carried out any longer and amputation had to be resorted to. On the whole, while beneficial effect following the administration of tissue extract No. 568 on the muscle pain is definite, tissue extract alone seems to be inadequate for the treatment of thromboangiitis obliterans. The treatment with sodium thiosulphate suggested by Rabinowitz (14) in addition to tissue extract should offer more encouraging results.

In eleven cases of diabetes mellitus with occlusive arterial disease of the lower extremities, five cases improved and six did not.

In two cases of generalized arteriosclerosis with paraplegia treated with tissue extract

and analgesics, one was greatly benefited and one showed some symptomatic improvements.

One of the two cases of Raynaud's disease, although well advanced is markedly improved and can attend to his duties.

However he is still suffering slight recurrences during extreme cold weather. The other case failed to improve. It is extremely interesting to note that the cases of thromboangiitis obliterans and intermittent claudication which manifested improvement with relief from pain, did not show any proportionate increase in the vascular pulsations of their extremities or any striking change in the Pachon-oscillometric reading. This bears out the observation of Barker, Brown and Roth (9) that the improvement is not entirely due to vaso-dilatation.

One case of erythromelalgia cleared up entirely.

Two cases of pernio (chilblains) were relieved.

MODUS OPERANDI

As we have previously stated we were impressed with the possibility that the Desmypyton fraction of tissue extract No. 568 exerts a regulating mechanism on the autonomic system mainly by its antagonism to epinephrine.

It is important for us, as clinicians, to visualize the autonomic or vegetative system as a whole, and not merely as a neurogenic mechanism (Table 2). The metabolic component of the autonomic system really represents the fundamental structure or basis of the mass of the organization capable of autonomous government. This has not been given sufficient consideration and study. The difficulty encountered in the study of the effect of many metabolites is probably the reason for our meager knowledge of this subject. Because of relative ease and accessibility, research has been directed and emphasis has been laid on the neurogenic and endocrine components of the autonomic (vegetative) system. In considering the pharmacology of Desmypyton let us bear in mind the metabolic as well as the neuroendocrine component of this important system.

A great deal of evidence has and is being accumulated, particularly through the work of

Sherrington, George W. Crile (15,16) and others to convince us that we must become more cognizant of the latent power of the autonomic or vegetative system. As wisely pointed out by Mayo in a recent paper, (17) local control of muscle should be visualized as part of molecular and colloidal energy commanded by the autonomic system. Cathcart and Benedict estimated that 25 per cent of the energy produced in the body can be expended by tissue under the control of the will, 75 per cent is being used by the so-called vegetative functions of the body of which we are unconscious.

We are acquainted with the somatic reflex arc but it is difficult for us to visualize a condition reflex along the autonomic pathway. Crile showed that by doing an adrenal sympathectomy he can check a morbid condition reflex. In this manner a pathological-physiological state is overcome. We look upon angina pectoris, intermittent claudication and allied conditions (as Crile does) as a morbid condition reflex caused, we believe, by noci-receptors (Sherrington). (A noci-receptor is a receptor of a noxious stimulus.) Among our patients we believe we have dealt with such varied noci-receptors that to treat any of them along a single line would be as fallacious as to treat a patient suffering from headache due to sinus infection, eye strain, migraine, intestinal stasis, typhoid fever, brain tumor or meningitis with the same remedy. It is strange that even at this late date statistics on angina pectoris and its treatments are published without considering the possible etiologic factors, or the noci-receptors.

In the treatment of these patients it is therefore important to thoroughly search for the etiologic noci-receptor and to eradicate it wherever possible. This unfortunately does not always check the morbid condition reflex. In many cases secondary (often minor) noxious influences can re-excite an already existing morbid or condition reflex. Therefore it is important also to desensitize the reflex pathway wherever possible. We can see the practical application of this concept in the analysis of our cases. We believe tissue extract checks medically the endocrine portion of the autonomic reflex by antagonizing epine-

phrine in a manner similar to but not as adequately as Crile does by adrenal sympathectomy. In addition we resort to proper psychotherapy, analgesics and sedatives to desensitize other components of the morbid reflex arc. The best and most permanent results were obtained in those cases where the above mentioned concept was fully taken into consideration while directing therapy (Table 3).

CONCLUSIONS

1. The Desympatone fraction of tissue extract No. 568 in addition to its epinephrine—neutralizing qualities, appears to influence the blood chemistry.

2. Desympatone seems to exert its influ-

ence on the metabolic component of the autonomic system.

3. Tissue extract No. 568 should be considered as an effective adjunct in the treatment of angina pectoris, intermittent claudication, thromboangiitis obliterans, Raynaud's disease, erythromelalgia, pernio (chilblains), occlusive arterial disease complicating diabetes mellitus, arterial disease secondary to hypertension and arteriosclerosis, and other allied conditions.

4. Of a total of 356 cases, approximately 70 per cent have shown clinical improvement following treatment with tissue extract No. 568.

TABLE I
THREE HUNDRED FIFTY-SIX CASES TREATED WITH TISSUE EXTRACT NO. 568

Diagnosis	Totals	Treatment	Complete Relief	Some Relief	No Relief
	42	Tissue extract only	12	11	19
Angina Pectoris	280	Tissue extract with routine treatment	78	62	64
	34	Tissue extract with routine treatment and surgical and medical removal of noci-ceptor	31	3	
Intermittent Claudication	26	Tissue extract and routine treatment	17	9	
Muscle pain in lower extremities (unknown origin)	13	Tissue extract and routine treatment		3	10
Generalized arteriosclerosis with paraplegia	2	Tissue extract analgesics and sedatives	1	1	
Diabetes mellitus with occlusive arterial disease of lower extremities	11	Tissue extract and routine treatment		1	1
Erythromelalgia	1	Tissue extract and routine treatment	1		
Raynaud's disease	2	Tissue extract and routine treatment		1	1
Pernio (chilblains)	2	Tissue extract and routine treatment		2	
Thromboangiitis obliterans (with ulcerations)	19	Tissue extract and routine treatment		11	9

TABLE II
AUTONOMIC SYSTEM (VEGETATIVE SYSTEM)

Sympathetic division	Parasympathetic division
1. Neurogenic Components	
a. Sympathetic higher centers. (Not universally accepted)	a. Parasympathetic higher center (Not universally accepted)
b. Thoracico-lumbar autonomic system (Sympathetic system).	b. Cranio-sacral autonomic system (Parasympathetic system.)
c. Sympathetic ganglia. Cervical, Thoracic, Lumbar, and their respective ganglionic sub-division.	c. Parasympathetic ganglia. Cranial, Enteric, Sacral, and their respective ganglionic sub-divisions.
II. Endocrine Components	
Epinephrine, etc.	Desympatone (?), etc.
III. Metabolic Components	
Calcium Cholesterol (and untold others still unknown).	Potassium. Lecithin (and untold others still unknown.)

TABLE III

Types	Causes
Psychic noci-ceptors	Pessimistic physician. Emotional disturbances. Business worries. Domestic discord.
Infectious noci-ceptors.	Lues. Tuberculosis. Focal infections.
Toxic noci-ceptors	Tobacco. Lead. Arsenic? Constipation.
Metabolic noci-ceptors.	Thyroid-hypo and hyperthyroidism. Pituitary-hypo and hyperpituitarism. Pancreatic disease. Biliary disease. Vitamin deficiency. Gouty diathesis. Anemias. Hypertensive and arteriosclerotic cardiovascular disease.
Mechanical and physical noci-ceptors.	Impacted tooth with nerve pressure. Neoplasm. Sensitive scar. Extreme heat and cold. Trauma. Pericardial scars. Aortic insufficiency (arrested rheumatic disease). Spondylitis.

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OPIMUM—ITS RELATION TO CIVILIZATION AND HEALTH*

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I had a narrow escape from denying myself the privilege of attending this meeting this evening and of enjoying the hospitality of your ancient town and Medical Society. This afternoon a voice from Dover came over my office telephone to the effect that I really was expected here, because the program was built around my paper. As I sat here listening to the learned discussion of the Honorable Chief Justice I realized just exactly what that statement meant. You know how stately buildings frequently surround an empty gallery or corridor. I presume this voice was endeavoring to tell me that I had been placed between two distinguished speakers on the program, and that I was in reality this gallery around which this program was built, this gallery of nothingness.

The other day I heard a man describe a

visit to a hospital for mental diseases. In the course of his travels about the institution he came upon a youngster spurred and booted and apparently equipped to go horseback riding, but he was astride a wooden horse. The visitor commented on the comeliness of the wooden steed and asked him about the horse, but the rider replied that it was no horse at all. The visitor insisted that it appeared to be a horse, but the rider said, "No, it is not a horse. This is a hobby." An inquiry as to the difference between a horse and a hobby brought forth the reply, "You can get off a horse, but you can't get off a hobby."

For some time the question of the reaction of personalities to disease has been something of a hobby of mine, and particularly have I been interested in the story of the effect of narcotics generally on the personality. I have been asked this evening to trace for a few moments the story of opium in its effect upon civilization, in its effect upon world peace, upon the mythology and the literature of peoples, and to comment briefly upon its effect upon individuals whom I have seen.

As we grow older it is difficult to go back to the days when we opened our brownish-covered books on Grecian mythology and saw standing there leaning lazily on his staff with half-closed eyes, and with wings folded impotently at his side, the god of sleep. This god, Somnus, was supposed to dwell in a cave, as you know, beside the River of Death. Before that cave there grew poppies, and from those poppies he distilled the dreams with which he filled the whole night. We all thrilled to the story of Somnus and his extracts of multi-colored dreams from the poppies that grew before his door.

From the very beginning of the mythology of peoples, poppies have been connected in some way or other with dreams, with unrealities, with a sort of evasion of the difficulties of everyday living. So we wonder not that the word "somnus" has some connection with the name of the poppy from which opium is secured. Just as there are families with the names of Smith, or Brown or Jones, so the family papaver, the family of the poppy, has attached to it a number of names: the poppy, *papavera somni ferum*—the sleep-bearing

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poppy. The poppies which grow in your backyard and mine are not the sleep poppies; they are the oriental poppy, gaudy red flowers with the black seeds. The sleep poppy is not that of which McRae sang when he spoke of Flanders Fields being peopled with poppies. The opium poppy is indigenous to the Near and Far East.

Opium, as the physician knows it, is the juice of this particular sleep-making poppy. To be sure, the poppies in your backyard and mine could be used for the same purpose, but not commercially so.

The antiquity of the poppy is of interest. Twenty-five hundred years ago Homer spoke of the sleep-producing possibilities of opium. Later Hippocrates and Aristotle, and even a physician in the army of Nero, described the fact that an infusion of the poppy would produce sleep and would relieve pain. Hence, has been known for many hundreds of years the fact which we know today—that pain is relieved by some preparation of the poppy.

Morpheus was the son of this sleeping god, and morphine, of course, is the name of the alkaloid, the derivative, the active principle of opium. But opium has written with a tragic finger on the scrolls of time. It has been a producer of war and rumors of war. It has appeared as a factor in world commerce, in world politics, and certainly has influenced the literature of the world.

It is said that the earliest effect of opium on India, from a commercial and sociological angle, was in about 1600. At the establishment of the Mogul Dynasty in India there began the effect of opium on this country's life which has persisted even to the present.

We read in our histories of the East India Company, and few realize that as early as 1600 Queen Elizabeth granted a charter to "The Governors and Merchants for dealing with the East Indies" under the name of the East India Company, and that for many years that company practically ruled India. In that rule there followed much of extravagance and of corruption, which had to do with the growth and production of and the commercial transactions in opium. That the East India Company, under the rule of Warren Hastings, up until 1856, practically governed

India with an iron hand. Opium furnished the money with which the Government and the East India Company existed.

I have said that opium has been a producer of wars and rumors of wars. It was this same Warren Hastings who is said to have placed a sloop in the harbor of Canton, China, and from thence for decades to have sold opium to the Chinese. But there came upon this boat an honest governmental officer, Commissioner Leu, who dumped overboard some ten million dollars worth of opium. As a result war was declared, which was the opium war of 1848. Later certain treaty arrangements were made by the Chinese, and insisted upon by the English. So that what most people consider as the corrupt Opium Wars of the middle of the nineteenth century had as their cause the commerce in opium with China.

World trade has been affected by opium. Greece, Bulgaria, Egypt, India, Turkey and China export millions and millions of pounds of crude opium annually. Perhaps 50 times as much opium is grown as is needed for medical purposes. What becomes of the ninety-eight per cent of opium which is produced by these countries?

It is said that ten years ago the United States imported about 250 tons of crude opium and that from those 250 tons approximately 30 tons of morphine were manufactured. Almost everyone knows that the dose of morphine is a fractional part of a grain. One can imagine the number of persons that could be normally and medically supplied from some thirty tons of morphine, which in reality would be equivalent to fifty grains a year for each man, woman and child in the whole United States. So it is certain that some illegal use is made of these many other tons of morphine which are actually produced. Let us see, in a few moments, what this is.

Of course the difficulty in the control of the opium commerce has been not only the demand for the drug but the high prices which are paid for it. Many of the nations, certainly the Far and Near East countries, have striven over the past century or more to control the use of opium, but easy smuggling still goes on, as is illustrated by the

story of the old Chinese lady who boarded a boat to Canton with a beautiful cat and five kittens that were later discovered to be very dead, but fully stuffed with morphine; and by the ship, the Elmer Heath, which steamed into Norfolk loaded with 2000 pounds of morphine which had been cleared from Seattle a few weeks earlier, had had a splendid trip no doubt to the Far East, and had returned to Norfolk to unload her cargo.

It is notorious that Japan is the go-between, the half-way house in the traffic of opium in so far as other nations are concerned. Much of the opium smuggled into this country has been first shipped from the United States by way of the Pacific Ocean and has later been returned to the Eastern or Western coast for illegal use.

One might spend many minutes elaborating on international trade relations and on the difficulties of controlling illicit opium traffic; but I must hasten on. Many international conferences have been held in which countries have endeavored to come together in the control of opium; but always that which separates right from wrong, which makes consciences see differently, and which makes it difficult to enforce any controlling legislation intervenes, and that is the dollar. Money has thwarted all of these attempts to correct this evil, and countries, just like individuals, continue to be perverse because of the profits which are inherent in the traffic of opium.

In this country the first serious attempt at control was made in March, 1915, when the Harrison Law, of which we all know, became effective.

At that time I was connected with the Philadelphia General Hospital. I was interested to observe the immediate effects of the enforcement of the Harrison Law, because there came out of the bushes, figuratively speaking, a new kind of person: a person no one suspected existed, and as we looked on this army of persons lo! we observed all sorts of persons there. We saw the high and the low. All professionals were represented: professors at colleges, lawyers, and ministers of the Gospel. These were they who had found it necessary for one reason or another to use

for non-therapeutic purposes the drug which is named after Somnus.

The opium addict was brought to light by the Harrison Law, because no one knew just what to expect of this new legislation and nobody wished to go to jail for having a forbidden drug found on their person.

Today we see few of these people, not I think because the country has purged itself of the illegal use of opium but because the underground channels have been fairly well established for the illicit securing of the drug. Our well meaning but somewhat egotistical police force in Philadelphia would like us to believe, because there is no demand for drug treatment in the city hospital, that the whole city of Philadelphia has been purged of the use of opium. Those of us who know this person, this opium user, are largely of the opinion that simply the procurement of the drug has been made easy and hence none desire to be cured.

I said a moment ago that the attempts on the part of China, Japan and other nations to purge themselves of the social degradation caused by the use of morphine have been largely a failure. The reason they have been a failure I think is because of the economic urge, and because of the fact that, like a hobby you, can not "get off" the morphine habit once you are on it, without help.

I remarked a moment ago that opium has exerted some effect upon the literature of the world. We need not recall more than casually the fact that some of our best known writers, transported temporarily into a new, a dreamy and unreal world, have allowed their imaginations to produce some of the most beautiful literature of which we have knowledge. Moliere, Beaudelaire, Francis Thompson, Bulwer-Lytton, Coleridge, DeQuincey, and possibly Poe, were users of opium for non-therapeutic purposes. A reference to one or two of these. As to DeQuincey: Yesterday I observed in a trolley car a person reading "The Confessions of an English Opium Eater." It is a beautiful exemplification of the finest and purest of English, and still in it are described new sensations, a world which is new to most people. Occasionally the moth does flutter too closely about the flame, and there are those

that only need to know of a vice to become vicious. Weak-minded persons who, having read DeQuincey's statements, "Opium, thou holdest the keys to Paradise," "To the hearts of the rich and poor alike, to wounds that will never heal, and to the pangs that tempt the spirit to rebel thou bringest an assuaging balm," are strongly tempted to try it. If that is not an invitation to persons of low character and resistance to try such statements are true or false, then I am much mistaken.

We know the story of the relationship of DeQuincey and Coleridge. They were both men of much charm and much ability. We know the chidings that took place between DeQuincey who, going to London, tried the tincture of opium as a cure for neuralgia, and Coleridge, who on a visit to London discovered a new remedy for all ills called Kendall's Black Drops. Coleridge tried this new medicine and relieved of pains, went about telling his friends that here was a miraculous remedy. But later he was to learn the infallible cure for pain was only the fallible opium.

Coleridge insisted to DeQuincey that he had only ordinary neuralgia while he, Coleridge, had the unusual type for which there was only one cure. Both used the arguments which you and I have heard so many times and which describe a pain which was unbearable, a disease which was unlike that afflicting any other person. The excuse for the use of opium often lies along this line.

It is interesting to note that DeQuincey wrote but one or two good things, and that Coleridge perhaps wrote only two. I am not sure whether "The Rhyme of the Ancient Mariner," is tinctured with opium or not; it sounds much like it. I am certain that the poem "Kubla Khan," in which Coleridge describes the pleasure dome, the soundless sea, and the caverns measureless to man sound to me unreal, fantastic, and like the products of an opium mind.

What of the effect of opium on the individual? Well, morphine, and gum opium, have the ability, as I said to make smooth the hardest and roughest of roads. It is the haven to which the spineless individual flees, the individual who stays down when he is knocked down. It is the drug in which the person of

no spiritual and mental calibre takes refuge, yet there are among such users some of the most brilliant and the most stalwart characters.

I do not know much about the inhabitants of Dover, but I venture to say that this is an unusual locality if there are not here those who have found it impossible to live, to stand the trials and difficulties of human existence, without the sustaining hand of opium. In the United States it is said that there are somewhere between one half million and ten million people using narcotic drugs. Nobody knows how many there are.

It has been said that wherever civilization has gone, two vices have always followed: alcohol and morphine addiction. We know that the Philippines became tinctured with opium long before the United States had anything to do with their government. We know that a certain righteous bishop and his committee brought the facts before the Governor of the Philippines, and later the President of the United States. As a result—Theodore Roosevelt, then President, pretty well purged the Philippines of opium.

What is the effect of the use of opium on the individual?

If you and I were to take opium or morphine over a period of a week or ten days, we would find when the pain in our face had left us that something remained besides the remembrance of the original ailment. Morphine has, as no other drug, the tendency to produce a desire to continue to use. Incidentally, the point that should be made here is this. It is dangerous to take medicines without the advice of a physician.

Self-dosage, the administration of drugs to oneself without knowing the contents thereof, should be avoided. Today, any of you, can go into a drug store and can buy sleep producing drugs that are capable of doing much damage, even of terminating life. It seems to me that those of us who are thinking people should continually urge and advise against lay people allowing well-meaning drug clerks to prescribe drugs for various so called common ailments. I am not asking for more work for the doctor, but I am trying to guard against the inherent dangers of self medication.

Fortunately, the Pure Food Act in this country has made it rather difficult to secure proprietary medicines which contain opium. But formerly, like the famous Kendall's Black Drops which Coleridge discovered, and which cured every ailment, many of our important drugs contained opium in some form, and the miraculous cures from toothache or other acute pain were a snare and a delusion.

At the Philadelphia Hospital we used to observe approximately 1500 of these persons a year, and they were usually, as might be expected in a city institution the lower economic and intellectual type, the type that seeks diversion, recreation, a thrill in the use of some unusual drug. I have never been able to adequately express the disgust which I feel when I observe a talented actor depict on the stage the degradation to which a drug taker may sink. Fortunately buses now do not do a thriving business as formerly in transporting the curious in New York and San Francisco to Chinatown to observe the degradation of opium smokers. The harm which is done by such a practice cannot be over-estimated. Furthermore, whenever the description of a famous criminal case occupies the front page of our newspapers fools rush in to try to repeat the crime.

Perhaps a person of a certain type of mind will say, "Well, that is one of the fool-killers which an Almighty and All Wise Providence has provided to purge society." I do not know the answer but it works that way anyway.

The character of the drug addict is a very interesting one. I one time walked through a drug ward in a bed of which was a rather famous Follies' character who had come to Philadelphia, and who had inadvertently failed to bring her supply of drug with her. She had developed a need for the drug, hence was brought to the hospital. I was commenting about the weather or some other harmless subject, when I felt a peculiar sensation in my pocket. She was trying to pick my pocket—her physician and benefactor—while I stood there talking to her. That type of person is more like a fox than a human being.

I have seen a mother who bewailed the fact that her son had been using drugs bring a

beautiful bouquet of chrysanthemums, or a fine bag of oranges to him, and when they were sufficiently searched plenty of narcotics were found therein.

At the county prison in Philadelphia we have a rather wide space which separates the visitor and the prisoner. The whole purpose of these wire walls is to prevent the passage of narcotics by the visitor to the prisoner. So one sees human personality under a curious guise, a guise in which a drug is God, and nothing must interfere with that God, so that families, or children, or jobs or religion have no influence whatever on the prevention of the use of the deadly opium. Use of narcotics without therapeutic indication is a cancer which eats into society. It destroys character, if the character is not deficient before the habit is started.

Finally, it has always been a question as to whether or not drugs destroy character, or whether destroyed character seeks drugs. I do not know which is the cause or which is the effect. I do know that for a vast number of these millions of people there is very little that can be done. I do know there is a group of professional men and women with good brains and good bodies who have inadvertently become users of opium, for whom much can be done. Until one can separate this group from the degenerate group, great confusion will exist as to treatment. I know this, however, that there is no drug in the pharmacopeia which will root out diseased moral and intellectual fiber and replace it with a healthy one, which will create a respect for law and which will make persons desire to work and to earn an honest dollar instead of a dishonest one. Also I do know that there exists a very close relationship between crime and the use of narcotics, that as the curve which depicts the earning power of the individual drops because of the use of drugs there is a rising curve of need, and that as these two lines cross, a brick through a jewelry store window or some other violence in the search of money is the answer.

It has been a very interesting experience for me to come here, but I have only touched the high spots in the discussion of a very long problem. I hope I have not too greatly fatigued you.

THE NEGATIVE ASPECT OF ANALGESIA IN LABOR

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It is with some trepidation that I present this paper, knowing that a young man should not be preaching, and realizing that the subject is perhaps only of academic importance and does not merit discussion, but most of all fearing the disapproval which such a subject is likely to arouse. However, since many physicians and practically all members of the public are quite enthusiastic about the use of analgesics in labor, I should like to call attention to some of the older and more conservative ideas on the subject. Almost every article written concerning the relief of labor pains proclaims the good and bad qualities of some specific method, or it summarizes the results obtained after trying several of the many methods. I do not intend to belittle or to elevate any particular method, but merely to consider a few points on the negative side of the question.

For a hundred years efforts have been made to relieve the pains of childbirth. Periods of time in which some drug has been actively used have come in waves, followed by a similar period of time when it was not used so enthusiastically, and then another wave of active use. This has continued to the present day. We are now in a period when vigorous attempts are made to produce a painless labor. The pendulum swings.

Physicians, as well as some of the most educated members of the public, have from time to time advocated for the mother complete relief of pain, from the time that labor begins until it ends. When ether and chloroform were first advocated other members of the same groups maintained that women were meant to suffer the pangs of labor and that any attempt to give relief was heretical. During these many years, authorities have differed, not only as to whether any attempt should be made to ease the pain, but also as to what drug or method should be employed. This difference of opinion has produced at least thirty different drugs or combinations of drugs, and methods of use. From the fact that there are so many methods it is self evi-

dent that there is no satisfactory or ideal one.

Physicians who use an analgesic or anesthetic of some sort do it for one or more of four reasons: (1) to aid in the mechanism of labor; (2) to relieve the patient of undue suffering; (3) to satisfy the patient, because she demands that something be given, not knowing for what she asks nor whether it should be given or not; (4) to make an impression on the patient and her relatives, so that it may be said, "she remembers no pain." Many physicians are forced to use something because of the euphonic advertising in lay magazines portraying the marvels of a painless childbirth. And it would be wonderful if it were only true. Describe any of the thirty methods, giving only the good points without any of the disadvantages, as the lay journals do, and it does indeed sound like a heavenly gift.

May I remind you that it was for one of the above reasons that Karl Brown first used opium during labor, in 1840, and ever since there have been spells of enthusiasm for morphine, alone or in combination with other drugs, and in spite of its dangers, there are still indications for it. After 1850, ether and chloroform were heralded as a god-send to the woman in labor, and they still have a place, but neither furnishes the ideal method, and both have their disadvantages. "Twilight sleep" was originated in 1902 by Von Steinbuechel and developed in 1905 by Carl Gauss at the Frauenklinik. It enjoyed popularity from 1910 to 1925, despite many eminent obstetricians who opposed its use. The controversy is still very much unsettled, some claiming that it is quite satisfactory despite its bad effects, while others claim that it has no place in obstetrics and anyone using it should have his license revoked.

Then Gwathmey in 1921, from the New York Lying In Hospital, gave us what was termed "Gwathmey's Synergistic Analgesia," and like morphine and scopolomine it is a quite satisfactory method and many use it almost routinely, but like all other methods it is not universally accepted. Since the barbiturates have recently become so popular, drug manufacturers in competition with each other have thrown many similar drugs on the market, and we have been urged to use them all.

In the literature we find listed the many advantages that the barbiturates have over other methods of analgesia, but other men are staunchly opposed to their use except in selected cases. All of the methods have their advantages and disadvantages. Some cases are suitable for spinal anesthesia or sacral block. Others may be given local infiltration with novocaine. Ethylene or nitrous oxide may be used during the second stage. Suitable cases may be given avertin, or rectal ether alone or in combination with a barbiturate.

The primary function of any method is to relieve the agonies of labor. Pain has always been pain, but modern civilization demands relief from it. The threshold of pain varies with the individual and with her mental conception of it. Fear and anxiety increase its intensity. The anticipation and thoughts of it make it worse, and the poor pregnant woman has nine months to anticipate and dread the onset. Labor, of course, is a painful proposition, but a woman will not mind it half so much, if during prenatal care she is taught not to dread it, if she has confidence in her physician, and if he gives her assurance. What she needs is vocal anesthesia.

Labor is a physiological process, not an abnormal condition. Labor pains are said to be less severe than the pathological pains of renal colic or gall bladder colic. After a long night of normal labor pains, the parturient mother next day feels fine, laughs, talks, wants to eat, and feels like getting up from her bed. Not so if she has suffered all night with renal or gall bladder colic. Next day she is exhausted—is sick. Cut the skin of a woman in labor with a pair of scissors and note the entirely different tone of her cry. Labor pains have been withstood since the beginning of time, and the pains themselves have produced no ill effects. There is pain when a tooth is extracted, and so the dentist gives gas, and if the process of labor were not fraught with complications, we could without hesitating, give something, but with the baby's life to consider, the length of the labor, cervical and perineal lacerations, maintenance of asepsis, puerperal morbidity of the mother and child, infant asphyxia, and postpartum hemorrhage we have to hesitate and wonder what will be best.

There is only a small group of physicians who do not occasionally use some drug during labor, and the chances are that you and I are going to use analgesia on some cases, if not on every case. There probably will never be a method that can be used routinely on every case, or that will be satisfactory to all physicians. Every man will have to choose the method that is best suited to the case on hand and the one with which he can get best results. In making this choice let us remember that giving birth to a child is a physiological process, and as long as this mechanism is normal let us do nothing which might make it abnormal.

One authority uses the following method: nembutal grains six and scopolamine grain 1/150 are given early in labor, and followed with nembutal grains three every three or four hours, as necessary. If there is much restlessness, another 1/200 grain of scopolamine is given. Or, to control the restlessness rectal ether in oil or nitrous oxide is used. In using this method the following points are stressed; toward the end of the second stage of labor it is usually necessary to do a low forceps delivery, and the method should not be used unless one is prepared to do a low forceps; do not use it unless the patient can be carefully watched; do not use it with morphine; do not give small doses and expect results; do not use it in a case of bad liver disease, although it has been used in eclampsia without bad effects; do not use it when there is definite disproportion or other evidence of dystocia; and, in nervous patients give larger doses as necessary.

The Council on Pharmacy and Chemistry of the American Medical Association asks that, when using the barbiturates, the following factors be remembered: danger of asphyxia to the child; restlessness of the mother; postpartum depression without co-operation; pulmonary congestion because the patient is unable to keep the bronchi clear of mucous; delirium may require morphine; intake of fluids is impaired; a special nurse is required; occasional toxic dermatitis; sudden death may occur; and it should not be given to debilitated patients.

Another authority asks us to remember the

increased excitement, the variable effects on the uterus, that contractions are stopped in a certain percentage of cases and that they are slowed in a higher percentage, the effect of the drug is variable lasting from one to three hours, the amnesia and analgesia is good in only about seventy per cent of the cases, apnea of the new-born occurs in ten per cent, when once given the action is uncontrollable, depression to the anesthetic degree is serious, and there is an individual variation in susceptibility to the drugs.

You and I are going to use analgesia. Civilization demands that we use it. Patients demand that we use it. Whenever possible, let us use vocal anesthesia, but when something else is necessary, let us consider the future of the mother and the future of the child.

THERAPEUTIC POINTERS

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Back injuries should be transported down ward.

In cases of fracture of the spine with complete paralysis, laminectomy may be indicated in the cervical region, is usually indicated in the dorsal region, and is always indicated in the lumbar region.

Fractures of the spicondyles of the humerus need no reduction as a rule and the simple moulded splint or body swathe with the elbow in acute flexion is all that is necessary for fixation.

Painful conditions associated with productive osteoarthritis can be relieved by the use of alcohol-neocaine nerve block.

Bleeding in cystic hypertrophy of the endometrium is checked by the luteinizing hormone of the anterior lobe of the pituitary.

Thyroid therapy frequently corrects scanty and irregular menses.

Hunger contractions of the stomach are promptly relieved by administration of dextrose by mouth.

Ten grains of sodium succinate in half cup

of hot water every three hours will often relieve pain due to cholecystitis.

The fluid extract of condurango is almost a specific in uterine hemorrhage and may be used whenever hydrastis is advised.

In cases where the patient is over forty years of age and suffering from irregular hemorrhage without a gross pathological lesion, the production of an artificial menopause by means of radium is the treatment of choice if drugs fail.

In cases of urinary suppression following prostatectomy, glucose, 10%, given intravenously will often have the desired effect upon the excretory function of the kidney.

Thyroid extract is an effective therapeutic agent in the management of true nephrosis.

Belladonna will aggravate incontinence of the urine in the aged. Instead it is best to prescribe strychnine.

Diathermy is often a successful means of eliminating endocervical gonorrhea.

Direct irradiation of the kidney has been suggested as a means of treating idiopathic hematuria which has failed to yield to other measures.

A vegetarian diet, restriction of water, and administration of phosphoric acid will aid in overcoming quite a few cases of nocturnal incontinence.

The modern treatment of chronic pyelonephritis consists of systematic eradication of all possible foci of infection, of the elimination of stasis in the upper and lower urinary tract, of routine drainage and lavage (alternating silver nitrate with penetrating dyes), and of the employment of local immunization by the injection of the filtrate directly into the renal pelvis.

Attempts to cause stones to pass from the solitary kidney pelvis or ureter in cystoscopic

(Continued on Page 140)

EDITORIAL

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VOL. VII

JUNE, 1935

No. 6

AIR CONDITIONING IN SUMMER

The historic old Baltimore & Ohio Railroad, America's oldest trunk line railway, has been the pioneer in many advances that have made history. Most recent of these is the relatively new science of the air conditioning of public places by which such places are furnished a constant supply of fresh air, duly filtered, properly humidified (or dehumidified) and seasonably chilled (or heated). Beginning with their crack trains, the *Columbian* and the *Capitol* and the *National*, the B. & O. has succeeded so phenomenally that today no through train of decent pedigree, on any railroad, would operate without this equipment, showing once again that imitation is the sincerest form of flattery.

We rode those pioneer trains with pleasure, and we recall the fidelity of those original

engineers to their own postulates, especially the last one: "seasonably chilled." No colds, no pneumonias, no deaths came from those early trains, because the temperature differential was never allowed to exceed 15° Fahrenheit. But the zeal of the imitator knew no such physiological bounds, so today we face, in trains and stores, in banks, hotels and theatres, a situation frequently fraught with danger. Many of the proprietors of these public places (and of these the theatres are the worst offenders) seem convinced that the lower the inside temperature the greater the appeal. What they should be taught is that the lower the inside temperature the greater the risk.

We had one experience not soon to be forgotten. Leaving the city street with a temperature of 97°, and minus all semblance of topcoat, we entered one of those two million dollar palaces devoted to the Hollywood luminaries, and in less than three minutes we were seated in a huge vault with a temperature of 54°. Now, by a mere coincidence, 54° is the exact temperature the year round in the depths of Luray Caverns, yet when one enters here in the summer time he is considerably provided—at a price, of course—with a mackintosh or lightweight overcoat. Furthermore, here one is exercising by walking, yet in that glamorous temple of Thespeus we were glued to one spot for over two hours, with the inside and outside temperatures showing a differential of 43°! And the cold we caught because of that manager's ignorance goes down in our memories as the very worst we ever had. Incidentally, we've never been back.

Research is still going on to determine the optimum differential, some authorities believing it should not exceed 5°, while others incline to the view that anything up to 20° is compatible with health. From our own observations, we believe that a differential of 10°-12° is about right for the average summer day, with 15° allowed on the torrid days. Certain it is, the managers of those public places who do not heed the mounting com-

plaints of their paying patrons are going to regret it some day, either because of lost patronage or Board of Health regulations. How much better it would be if they would voluntarily return to reason and themselves set their house in order—at, say 12°.

MISCELLANEOUS

Visiting Nurse Association

ANNA VAN W. CASTLE, R. N., *Director*
Wilmington, Del.

SERVICE EXPLAINED

The Visiting Nurse Association is prepared to give nursing care and treatments to any patients in their homes who are under the care of a physician. Only two visits may be made to a patient if a doctor is not in attendance, one to ascertain the patient's condition and advise physician, and the other to find out if the physician has been called. All types of cases are cared for by graduate registered nurses.

ORDERS FOR NURSES

The Association has no standing orders, other than to take temperature, pulse and respiration, put patient to bed, and advise a physician. No care or treatment may be given without getting in touch with the physician for his order. No verbal orders may be received through the patient or member of the family. Orders must either be written by the physician and left in the home for the nurse, or telephoned by the physician to the Association office or to the nurse.

PRENATAL CARE

Nurses may make an introductory visit on a prenatal case, and if the patient is registered with a private physician the nurse must call the physician and obtain orders for either full prenatal care, or instructive care, before making a second visit. Full prenatal care includes the taking of the systolic blood pressure and urinalysis for specific gravity and albumin. Any abnormal symptoms to be reported to the physician. If the patient has not seen her physician, the nurse urges that she see her physician at once.

SPECIAL HEALTH TREATMENT

The nurse *may not* give serum or vaccine treatments. The nurse *may not* give anti-toxin. Cultures *may not* be taken. For all

hypodermic treatments a written order and specific dosage to be clipped to chart.

NURSES' HOURS

The nurses are on duty from 8.00 a. m. to 5.00 p. m. Call (Wilmington 6511) to be made in the forenoon should reach the office by 8.30 a. m. Calls to be made in the afternoon should be received by 1.30 p. m. Two nurses are on duty on Sundays and holidays, and may be reached through the courtesy of the Physicians Exchange (Wilmington 6234).

FEES

For those patients who can afford to pay a charge is made of \$1.00 per visit; \$1.25 is charged for maternity visits. For a special appointment or hourly service \$1.50 is charged for the first hour, additional time up to four hours is pro-rated. (The fees are based on the actual cost per visit to the organization.)

Part-pay service is rendered to those patients unable to meet the full cost of the visit.

Free service is rendered to those on Relief or to those who, on investigation are found unable to pay. (Free work amounted to 42% of the Association service in 1934.)

Patients who are industrial policy holders of the Metropolitan Life Insurance Company, the Equitable Life Insurance Company, and John Hancock Insurance Company, may receive care at the expense of their company, with whom the Association has contracts to cover this nursing work. These visits are subject to the rules and regulations of the individual company, i. e., a chronic case may receive but six visits, a normal maternity eight visits, acute illness may have more visits but is subject to curtailing rules and regulations.

The Association assumes the responsibility, if so ordered by the physician, to continue visiting any case needing care after the insurance grant has been used up. In some instances the patient will pay for these visits, but more often this is free work.

TERRITORY COVERED

District I—City of Wilmington.

District II—Rural to Holly Oak; to New Castle, to Black Cat; to Hockessin and Yorklyn.

District III—Rural to Richardson Park,

Elsmere, Newport, Marshallton, Stanton. All this work carried since 1933 for insurance and pay cases, free work only as is covered by local contributions.

WELL BABY CONFERENCES

These conferences are held weekly at Boys' Club Building, 2-4 Tuesdays; and Neighborhood House, 2-4 Wednesdays. A physician is in attendance every second week. Their objects are to teach the mother the value of medical supervision, and how to keep her children well; the importance of a weekly gain in weight and of a yearly physical examination and the importance of proper feeding and diet, which is regulated by private physician or the conference physician.

The policies in conducting these conferences are:

1. Well babies, from three weeks of age and children up to six years, are admitted to conferences. Well babies under the care of a private physician are admitted for weighing and measuring only. If there is any illness other than a condition which has arisen from improper feeding, the baby is excluded. It is, however, the duty of the nurse in charge to see that the mother with a sick baby gets medical advice, and the mother is instructed to call the family physician. Such cases always have a home follow-up visit to see that medical attention has been obtained.

2. A diagnosis of disease in babies, other than malnutrition, is not made by the conference physician.

3. No prescriptions are given.

4. A physical examination is given on admission. Defects or corrections are referred to the family physician.

5. No child is examined unless accompanied by the mother or some relative who is responsible for the child, and to whom recommendations can be made.

6. Toxoid treatment is given by the conference physician to the children of families who are financially unable to visit a private physician. This is sanctioned by the Medical Society and State Department of Health.

MATERNITY CLASS

The Association maintains a class for pregnant mothers at Neighborhood House, Friday, at 2.00 p. m. This class is taught by one of

the staff nurses, who gives the mothers, in eight lessons, instructions in securing medical supervision early in pregnancy, and through well-planned demonstrations the proper diet, preparation for a home delivery, and care for herself and baby.

ETHICS OBSERVED

It is the desire of the Association to be only of assistance to the physicians. The staff nurses understand that absolutely no suggestions be given as to preference for any physician, and clinics are to be used only when other medical care cannot be secured.

The physicians are asked to make any suggestions at any time to the Director or to the Medical Advisory Committee. Any dissatisfaction with the service should be reported to the Director, so that any misunderstanding or error may be immediately corrected, to keep up the standards of both the nurse and the organization. The Association is endeavoring to produce a nursing service that meets the need of the whole community, and that is a real help to the medical profession.

Let's Have a Foundation

We propose a Foundation with a capital of many millions of dollars. We believe that there should be no slightest difficulty in raising this money. The majority report of the Committee on the Cost of Medical Care indicates that we have sufficient incomes readily to contribute the paltry sum.

We demand a study of two grave problems confronting the insufficient income class. These are respectively, exposure and under-nutrition. Either of the above has caused far more illness and death than lack of proper medical care.

There can be no question that the best clothing and the highest quality of food cost too much. A survey should be made; a committee of Doctors of Philosophy must be named at once. A Federal grant of a vast sum of money may be readily secured for this investigation. When this sum is exhausted the Doctors of Philosophy will report that good food and good clothes are expensive.

Our Foundation will then insist that certain security legislation be introduced in Congress and in the legislatures of the various

States. Compulsory clothing and food insurance laws will be enacted.

The Rosenwalds and the Filenes will be compelled to discontinue the manufacture or sale of good clothing. Mr. Milbank will have to supply a cheaper and poorer grade of milk. Since we have some who cannot afford good clothing and good food there is only one recourse,—i. e., compel everyone of that particular income-class to purchase, through insurance, the cheaper grade provided.

To insure the proper administration of this benevolent legislation we must have a large group of salaried directors. For lack of a better name we shall call them the Well-fed Workers. The latter are carefully chosen elderly maiden ladies of both sexes who, in the interest of fairness, must have not the slightest knowledge of either the food or clothing business.

Statistics of foreign countries, where the system has been in vogue since it has been in vogue, go to show that Mr. Filene may earn up to \$2000.00 per annum, if he has enough clothing-buyers on his panel. Mr. Milbank may possibly earn the same, if enough Eagle Brand is elected by the insured on his list.

Having thus taken care of the insufficient-income class the Well-fed Workers will next establish in all cities and towns certain little depots for supplying these necessities to the real indigents. We shall call these depots "free clinics." They shall be under the direction of other salaried Well-fed Workers. The work and material will be donated by the food and clothing people.

Mail checks forthwith to the Physicians' Funny Foundation, Ink., just ink, that's all.

—Oregon Medical Reporter.

Corpus Luteum Therapy

George W. Corner, Rochester, N. Y. (*Journal A. M. A.*, May 25, 1935), is aware that his discussion of corpus luteum therapy cannot immediately result in curative benefit to a single patient, nevertheless he believes that it will be profitable to consider the subject as it stands today, from the mutual standpoint of the practitioner and the investigator. Such

consideration will not only explain the physiologic basis on which practical applications are to be worked out but also help, he hopes, to clear away the misconceptions and false hopes by reason of which in the past so many bottles and pill boxes have been filled with elegant but inert pharmaceuticals. Therefore he discusses the function of the corpus luteum, progesterin (the hormone of the corpus luteum favoring gestation), relaxin (another substance found in extracts of the corpus luteum, which has the property of relaxing the symphysis pubis in the guinea-pig in a manner similar to the normal relaxation which occurs in that species during pregnancy), the availability of progesterin, the clinical possibilities of corpus luteum therapy and its empirical preparations. He concludes that the American practitioner now has at his disposal no corpus luteum therapy that has passed the test of experiment, but current work with progesterin promises to give in the future a corpus luteum hormone with which the possibilities of therapy may be explored.

THERAPEUTIC POINTERS

(Continued from Page 136)

maneuvers are dangerous because the stone in passing is likely to obstruct the ureter.

Bismuth should be given with caution in all patients with faulty elimination.

When syphilis and tuberculosis are present at the same time the administration of salvarsan and its analogues may be followed by disaster. The possibility of a tuberculosis exacerbation should always be thought of.

Some pediatricians follow the rule of giving anti-luetic treatment in all children who have indefinite symptoms and who do not respond to ordinary treatment.

A patient sensitive to one arsenical is more than likely to be sensitive to other arsenicals.

No less than 20 injections of an arsephenamine and more if possible preferably in one

or two courses, and an equivalent amount of heavy metal without any interval should be given in all early cases of lues to control infectiousness.

—

Bismuth should not be substituted for arsenic in primary or secondary syphilis, except in patients resistant to arsenical treatment.

—

In the treatment of patients with secondary syphilis the anti-luetic remedy should be given as intensively as possible.

—

Too little arsephenmine is worse than none at all, since it deprives the patient of the source of his resistance and offers no adequate substitute.

—

Herpes zoster is a self-limited disease, but its course is shortened and the severe pain accompanying it is usually rapidly relieved by pituitrin injections.

—

In urticaria, angioneurotic edema, and serum sickness, adrenalin given hypodermically in doses of 0.5 to 1.0 cc of a 1:1000 solution produces relief.

—

Xerodermic patients are very liable to get eczema. A good preventative is to keep the skin as smooth and supple as possible by the free use of glycerine in the form of glycerite of starch.

—

Intertrigo yields quite nicely to iodine therapy. A wad of cotton, held by a hemostatic forceps, is soaked in an alcoholic solution of iodine (1:100) and the affected area is rubbed vigorously with it. The scales should have previously been removed. The burning sensation lasts only a minute. After this application an ointment is applied. Very often the troublesome itching is abolished after the first application of iodine.

—

Sodium thiosulphate given intravenously in ascending doses beginning with one gram and increasing to one and a half grams daily will often cure a case of arsenical exfoliative dermatitis.

BOOK REVIEWS

Doctors and Juries. By Humphreys Springstun, LL. B., Detroit. Pp. 155. Fabrikoid. Price, \$2.00. Philadelphia: P. Blakiston's Sons & Company, 1935.

This is an elementary, non-technical thesis on that ground which medicine and law share in common. It covers briefly a wide range of subjects, but most stress is placed on malpractice suits and the various angles of insanity, all of which is interesting and informative. The viewpoint is sensible and conservative. The style in spots is a bit verbose, and the subject matter might, with profit, be handed out in smaller mouthfuls—one paragraph is actually four pages long. Nevertheless, these minor ailments do not detract from the value of the book nor affect the good advice it contains: it really is one of the better short monographs on this subject.

Names of Surgical Operations. Edited by Carl E. Black, M. D., for the Western Surgical Association. Pp. 102. Cloth. Price, \$3.00. St. Paul: Bruce Publishing Company. 1935.

The purpose of this little manual is to simplify a subject that certainly needs it. For instance, some 22% of the terms in a famous dictionary are not formed on correct philologic rules, yet this situation seems beyond relief, since the people make the language and the lexicographer merely records it. The committee makes no attempt to correct this situation, nor does it divide operations into major or minor—two wise decisions. It did succeed, however, in compressing 3313 names into 743, a huge task and one that earns for it our praise and admiration. In the appendices, it lists 188 fundamental surgical procedures; numerous philologic corrections; and several suffixes. We have found, so far, a remarkably small number of typographical errors.

Should we say that this work will find a general and prompt acceptance we would surely be optimistic, such is the inertia of the medical profession; yet this monumental endeavor will unquestionably pioneer the efforts of the future to simplify and standardize the nomenclature of the operating room. To facilitate this most desirable end the book should be on the desk of every surgeon and in every hospital.

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Laryngoscope, 1935, XLV, 149-154*

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Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245*



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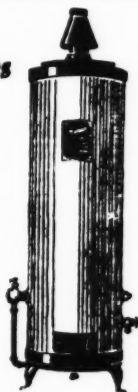
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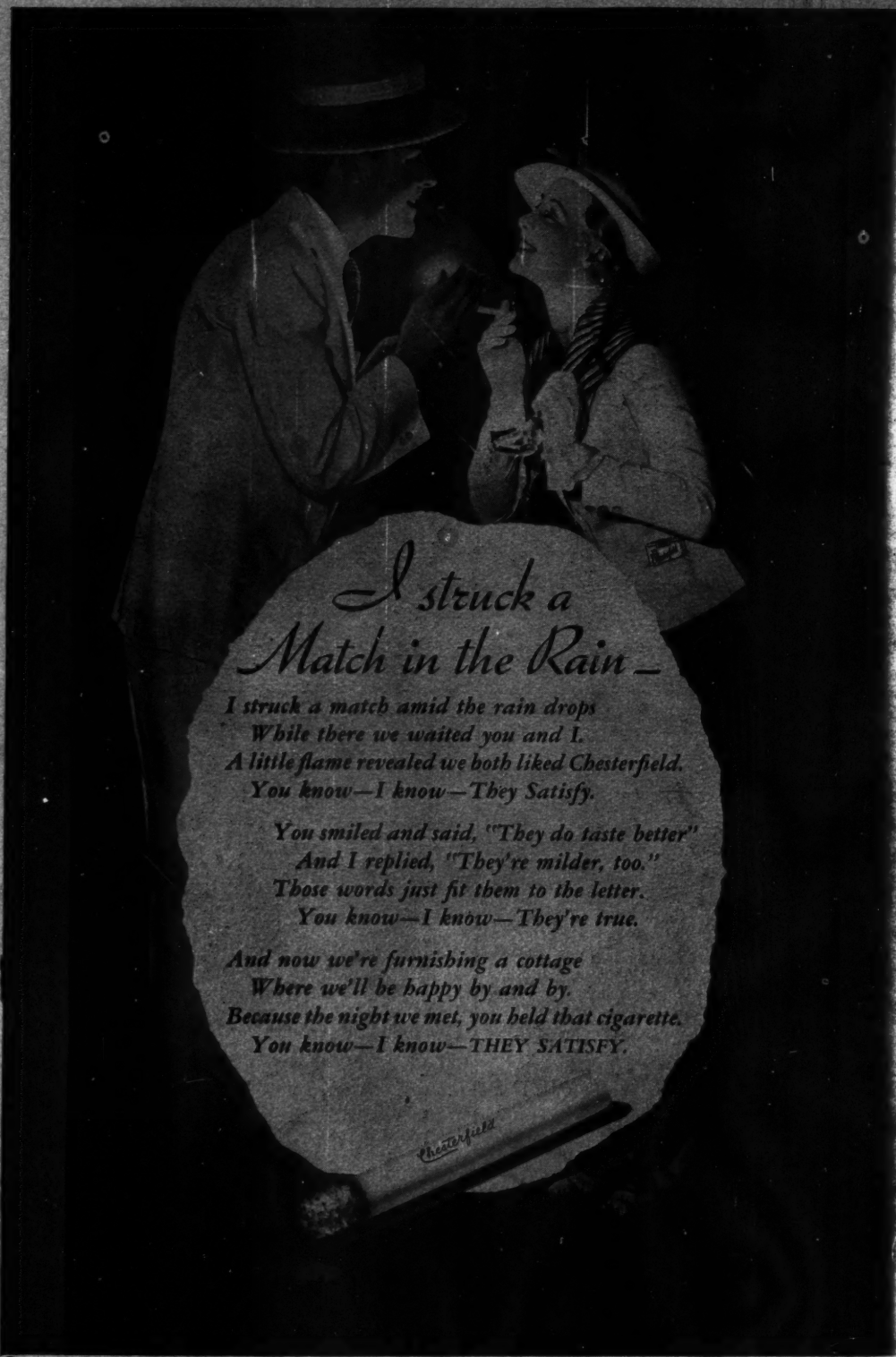
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A black and white photograph of a man and a woman in a romantic embrace, wearing hats and coats, suggesting a rainy night. The scene is dimly lit, with the couple's faces and clothing highlighted against a dark background.

I struck a Match in the Rain—

*I struck a match amid the rain drops
While there we waited you and I.
A little flame revealed we both liked Chesterfield.
You know—I know—They Satisfy.*

*You smiled and said, "They do taste better"
And I replied, "They're milder, too."
Those words just fit them to the letter.
You know—I know—They're true.*

*And now we're furnishing a cottage
Where we'll be happy by and by.
Because the night we met, you held that cigarette.
You know—I know—THEY SATISFY.*

Chesterfield

